

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and remarks.

The specification has been amended on pages 3 and 7 to correct a typographical error in the term DISPARLON, as pointed out by the Examiner.

Claims 1 and 4 have been amended to recite "water-based metallic paint" rather than "paint liquid", thus rendering moot the first portion of the Examiner's rejection under 35 U.S.C. § 112, second paragraph. Claim 6 has been amended to properly recite a Markush group, thus rendering moot the second portion of the Examiner's rejection under 35 U.S.C. § 112, second paragraph. Additionally, the claims have been amended to make minor editorial changes, in order to place the claims in a more conventional U.S. format. Therefore, no new matter has been added to the application.

The objection to claims 2-7 has been overcome by amending claims 2-7 (as well as withdrawn claims 9-11) to recite "The" instead of "A", as suggested by the Examiner.

The rejection of claims 1-7 as being indefinite under 35 U.S.C. § 112, second paragraph has been overcome by the claim amendments discussed above.

The patentability of the present invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

The rejection of claims 1 and 3-7 under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as being unpatentable over Wakui is respectfully traversed.

The Examiner takes the position that Wakui discloses polyamide anti-settling agents for aqueous metallic paints. The Examiner admits that Wakui is silent with respect to the storage modulus of elasticity of the paint. The Examiner asserts that the paint composition is substantially similar to the currently claimed paint composition, and thus the paint composition disclosed by Wakui would inherently meet the requirements for the storage modulus of elasticity.

Pointing to column 4, lines 24-28 of Wakui, the Examiner states that Wakui discloses that the amount of antisetling agent is 0.25 to 5 %, particularly preferably 0.5 to 3 % by weight in terms of the polyamide based on the paint vehicle.

"Paint vehicle" usually means a liquid which remains after pigment has been removed from paint. Fundamentally, paint vehicle comprises a base resin, a crosslinking agent and a liquid medium.

The content of polyamide resin which is stipulated in the present invention, on the other hand, is expressed by parts by weight on the basis of "the resin composition for water-based paint". Said resin composition is composed of a base resin and a crosslinking agent, and contains no liquid medium, as is clearly seen on page 2, lines 15-28 of Applicants' specification.

Thus, the present invention and the teachings of Wakui are different from each other in basis for "parts by weight" or "% by weight" with which the content or the addition amount of polyamide resin or antisetling agent is expressed.

Hence, it is unsound to make a simple vis-à-vis comparison between "5-15 parts by weight of a polyamide resin per 100 parts by weight of the resin composition" as a content of polyamide resin in the present invention and "0.25 to 5 %, particularly 0.5 to 3 % by weight in terms of the polyamide based on the paint vehicle" as an addition amount of antisetling agent in Wakui.

Wakui only provides a single example of paint composition as mentioned in TEST EXAMPLE in columns 7 to 8. The make-up of the paint composition as shown in said TEST EXAMPLE is as follows:

Coatax WF-268 (water soluble acrylic resin made by Toray Co. Ltd.)	44.1 parts
Cymel 370 (melamine resin made by Mitsui Cytec Co., Ltd.)	6.4 parts
Deionized water	49.5 parts
Iriodin 504 (metallic pigment sold by Merck Japan Co., Ltd.)	5.0 parts
Antisetling agent for aqueous paints (one of the products of Examples, Comparative Examples and on the market)	2.0 parts

The 2.0 parts of addition amount of antisetling agent as shown in the above-mentioned Example of Wakui corresponds to 2.0 % by weight in terms of the polyamide based on the paint vehicle (i.e., the total 100 parts of Coatax WF-268, Cymel 370 and deionized water).

On the same basis as in the present invention, i.e., on the basis of the total amount of Coatax WF-268 (base resin) and Cymel 370 (crosslinking agent) which is 50.5 parts (44.1 parts + 6.4 parts), however, the proportion of the above-mentioned addition amount of antisetling agent is calculated as follows:

$$2.0 \text{ parts} \times (100/50.5) = 4.0 \text{ parts by weight per 100 parts by weight of the resin composition}$$

which falls outside Applicants' recited range of "5-15 parts by weight".

Wakui discloses no other example than the above-mentioned Example, with respect to paint composition. Thus, the teachings of Wakui fail to teach or suggest Applicants' recited amount of polyamide resin.

Furthermore, since the composition of Wakui differs from Applicants' claimed composition, as discussed above, the Examiner's assertion that the storage modulus of elasticity of the paint of Wakui would inherently be the same as that of Applicants' is unfounded.

For these reasons, the invention of claims 1 and 3-7 is clearly patentable over Wakui.

The rejection of claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Wakui in view of Kusumoto Chemicals (DISPARLON information sheet) is respectfully traversed.

The Examiner relies on the teachings of Wakui for the reasons stated above. The Examiner states that although Wakui discloses polyamide anti-settling agent, the reference fails to disclose a polyamide wax. The Examiner states that Kusumoto discloses Disparlon, a compound based on an amine salt of a polyamide wax designed for water based systems. The Examiner takes the position that it would have been obvious to one of ordinary skill in the art to use Disparlon as the polyamide anti-settling agent in Wakui.

Wakui has only a single example wherein 4.0 parts by weight of antiseptling agent is used per 100 parts by weight of the resin composition (i.e., the total amount of base resin and crosslinking agent), as stated above. Hence, even though DISPARLON had been used as antiseptling agent in said example, the paint composition of the present invention could not have been attained.

When the 7.5 parts of DISPARLON in Example 1 of the present specification (page 7, lines 1-31) is replaced with 4.0 parts of DISPARLON in accordance with Wakui's teaching, the resulting paint has a storage modulus of elasticity of 84 Pa/20°C, as shown in the attached Rule 1.132 Declaration. This clearly fails to satisfy the requirement of at least 100 Pa/20°C, as recited in Applicants' claims.

Moreover, the above-mentioned paint is much inferior to the paint of Example 1 of the present application also in FF property, IV value and metallic appearance, as also shown in the attached Rule 1.132 Declaration.

Therefore, one of ordinary skill in the art would not foresee the present invention from the teachings of Wakui, which taught no idea of using polyamide resin in the specifically selected amount ("5-15 parts by weight per 100 parts by weight of the resin composition") in a water-based metallic paint and from DISPARLON information sheet of Kusumoto Chemicals.

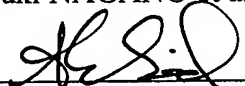
For these reasons, the invention of claim 2 is clearly patentable over the cited combination of references.

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of objection and rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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